IS THE DARK WEB LEGIT? THE CASE OF DARK WEB SEARCH ENGINES

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Abstract

One of the most controversial networking technologies available today is the "Dark Web." The Dark Web includes collections of Web sites (i.e., HTML, CSS, PHP, MySQL, and Javascript software) that are only accessible with special routing software. The most popular of these systems – and perhaps the most infamous – is Tor, which enables "hidden services," or Web sites only accessible with the Tor Browser. There are other systems, however: the Invisible Internet Project (i2p), whose router allows access to hidden "eepsites", and Freenet, whose router allows access to Freesites.

For some, the Dark Web is decidedly illegitimate: it is a haven of drug dealers, scammers, thieves, and traders of child abuse images. For others, it is a legitimate protector of free speech, allowing whistleblowers like Edward Snowden to expose government excesses and citizens to debate controversial issues without fear of being monitored. In other words, the Dark Web, I suggest, is going through a trial of legitimacy. Is it legitimate, or not?

Three Meanings of Legitimacy

To answer this question, I propose three definitions of "legitimacy," each with their own objects, power practices, and social groups. First, drawing on Weberian sociology and political theory, "legitimacy" can refer to the construction of consent to the state's claim to the monopoly on the use of violent force. In other words, the state has an interest in cultivating the belief that its violent power is legitimate. The object of this form of legitimacy is the citizen-subject. The power practices of this form are arrest, execution, and imprisonment. The social groups associated with this form of legitimacy are government bureaucrats, law enforcement agents, and security and surveillance agencies.

A second meaning of "legitimacy" is often tied to organizations such as corporations. In this view, "legitimacy" refers to an entity being respectable, legal, and proper. This definition comes from organizational and management communication scholarship. The objects of this form of legitimacy include consumers, investors, and employees. The power practices here include firing, lawsuits, and denying access to resources. The relevant social groups are managers, administrators, and corporate bureaucrats.

I also propose another meaning of "legitimacy", one that is not often discussed in scholarly work: "legit," or "cool, real, and authentic." This definition draws heavily on Bourdieu's scholarship on fields of cultural production, as well as scholarship on popular culture. Here, to be legit is to be real, not bullshit, not a scammer. It is to be an insider, an authentic member of a group. The objects of this form of legitimacy include artists, intellectuals, critics, and hackers. The power practices are those of inclusion and exclusion, differentiation and distinction, and criticism. Given this form's insularity, the social groups are the same as the objects: artists, intellectuals, critics, and hackers.

Why Articulate "Legitimacy" with the "Dark Web"?

My use of these concepts of legitimacy arises from the fact that Dark Web social groups regularly use the term. For example, law enforcement agencies regularly decry the illegitimate activities (e.g., drug and gun markets, hacker forums, taboo images) that can be found on the Dark Web, and they claim the right to arrest DW users, seize equipment, and monitor activities. In contrast, free speech advocates argue that the DW is a bulwark against the excesses of state power, because its anonymizing technologies allow for activists and dissidents to challenge the state's claims to legitimacy.

Second, my interviews with DW users and site makers has revealed that there is a social group seeking to make the Dark Web legitimate in the second sense (acceptable, legal, respectable). This social group seeks to import "clear Web" practices such as social networking software, advertising networks, and search engines to the Dark Web, making the Dark Web legible to everyday Internet users who are concerned about their privacy.

Finally, a commonly heard question on the Dark Web is: "is such-and-such site legit?" In other words, is the site in question a "real" drug market or a scam? Is it a hacker forum full of "legit" hackers, or are they mere script kiddies? In this version of Dark Web legitimacy, to be legit is to not be a scammer, to have technical chops, to not bullshit about one's abilities or products. Here, the values are realness, rawness, avoiding being arrested, and showing off one's technical skills.

Rather than deny this polysemy and seek to find some precise meaning for the term "legitimacy," I instead am exploring a symbolic and material economy of legitimacy as this economy traffics across these different meanings and practices. I thus take these divergent meanings, put forward by different social groups, as a sign that the Dark Web is undergoing a "trial of legitimacy." Respecting these meanings, I seek to break out of the constraints of "legitimate/illegitimate" and instead offer a more complex theory of technological legitimacy that takes into account that term's contradictory meanings.

Dark Web Search Engines

To illustrate this, I will explore Dark Web search engines. I draw on interviews with 5 DW search engine operators, 24 months of participant observation on Tor hidden services, the i2p network, and Freenet, as well as technical literature on searching encrypted networks. I will consider DW search engines as part of a larger symbolic and material

economy of legitimacy. I suggest that DW search often mediates between state power (i.e., legitimated monopoly of violence) and the "authentic" Dark Web (i.e., legit services and sites).

On the one hand, DW search engine operators seek to constrain searchers' abilities to find everything on the DW. They often refuse to index sites dealing with practices they themselves find illegitimate (i.e., terrorist forums, child abuse image sharing). They argue this will help make the Dark Web more acceptable to the mainstream.

On the other hand, however, DW search engine operators actively challenge the state's claims to by power by denying states access to information about DW sites and users. Moreover, they appropriate the "legit" Dark Web by allowing greater access to it, including access to dangerous practices (most often drug markets and hacker forums).

I ultimately argue that the economy of legitimacy apparent in Dark Web search can be found in other Dark Web-based practices, including social networking sites, markets, and network protocol development. Therefore, I suggest future lines of Internet research that can explore the Dark Web.

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